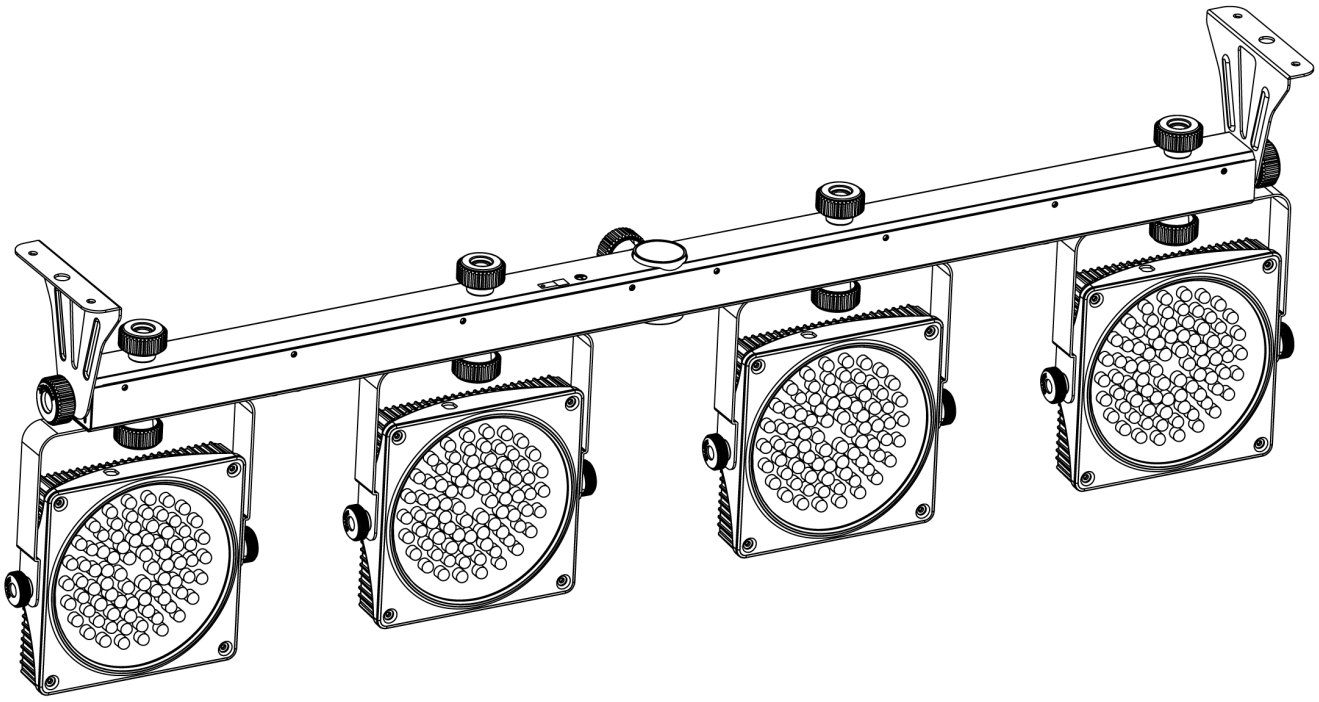
www.americanmusical.com

4BAR™ Flex

User Manual



CHAUVET®

Value • Innovation • Performance

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1. BEFORE YOU BEGIN

What Is Included

- 1 x 4BAR™ Flex
- 1 x Power Cord
- 1 x Carrying Case
- 1 x Footswitch
- 1 x Warranty Card
- 1 x Quick Reference Guide

Unpacking Instructions

Immediately upon receipt, carefully unpack the product and check the container to make sure you have received all the parts indicated above in good condition.

Claims

If the container or the material inside the container (the product and included accessories) appear damaged from shipping, or show signs of mishandling, upon receipt notify the carrier immediately, not CHAUVET®. Failure to do so in a timely manner may invalidate your claim with the carrier. In addition, keep the container and all the packing material for inspection.

For other issues such as missing components or parts, damage not related to shipping, or concealed damage, file a claim with CHAUVET® within seven (7) days of receiving the merchandise.

Text Conventions

Convention	Meaning
1~512	A range of values
50/60	A set of values of which only one can be chosen
Settings	A menu option not to be modified
Menu > Settings	A sequence of menu options to be followed
<ENTER>	A key to be pressed on the product's control panel
ON	A value to be entered or selected

Icons

Icon	Meaning
	This paragraph contains critical installation, configuration, or operation information. Failure to comply with this information may render the product partially or completely inoperative, cause damage to the product, or cause harm to the user.
	This paragraph contains important installation or configuration information. Failure to comply with this information may prevent the product from functioning correctly.
	This paragraph reminds you of useful, although not critical, information.

Document Information

The information and specifications contained in this document are subject to change without notice. CHAUVET® assumes no responsibility or liability for any errors or omissions that may appear in this manual. CHAUVET® reserves the right to update the existing document or to create a new document to correct any errors or omissions.

You can download the latest version of this manual from www.chauvetlighting.com.

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Author	Date	Editor	Date
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Product at a Glance

Use on Dimmer	⊘	Auto Programs	✓
Outdoor Use	⊘	Auto-ranging Power Supply	✓
Sound Activated	✓	Replaceable Fuse	✓
DMX	✓	User Serviceable	⊘
Master/Slave	✓	Duty Cycle	⊘

Safety Notes

Please read the following Safety Notes carefully before working with the product. The Notes include important safety information about installation, usage, and maintenance.

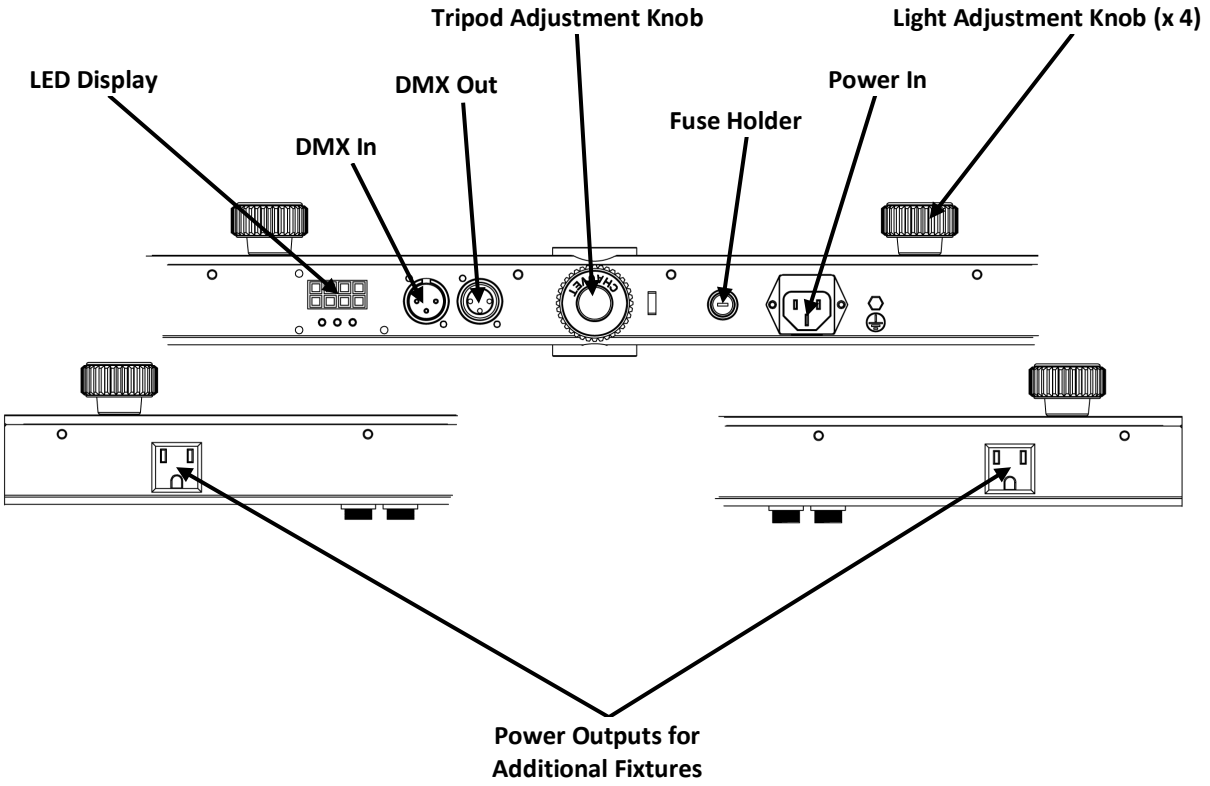
- Always connect the product to a grounded circuit to avoid the risk of electrocution.
- Always disconnect the product from the power source before cleaning or replacing the fuse.
- Avoid direct eye exposure to the light source while the product is on.
- Make sure the power cord is not crimped or damaged.
- Never disconnect the product from power cord by pulling or tugging on the cord.
- If mounting the product overhead, always secure to a fastening device using a safety cable.
- Make sure there are no flammable materials close to the product when operating.
- Do not touch the product's housing when operating because it may be very hot.

- Always make sure that the voltage of the outlet to which you are connecting the product is within the range stated on the decal or rear panel of the product.
- The product is for indoor use only! (IP20) To prevent risk of fire or shock, do not expose the product to rain or moisture.
- Always install the product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Be sure that no ventilation slots on the product's housing are blocked.
- Never connect the product to a dimmer.
- Make sure to replace the fuse with another of the same type and rating.
- Never carry the product from the power cord or any moving part. Always use the hanging/mounting bracket or the handles.
- The maximum ambient temperature (Ta) is 104° F (40° C). Do not operate the product at higher temperatures.
- In the event of a serious operating problem, stop using the product immediately.
- Never try to repair the product. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center.

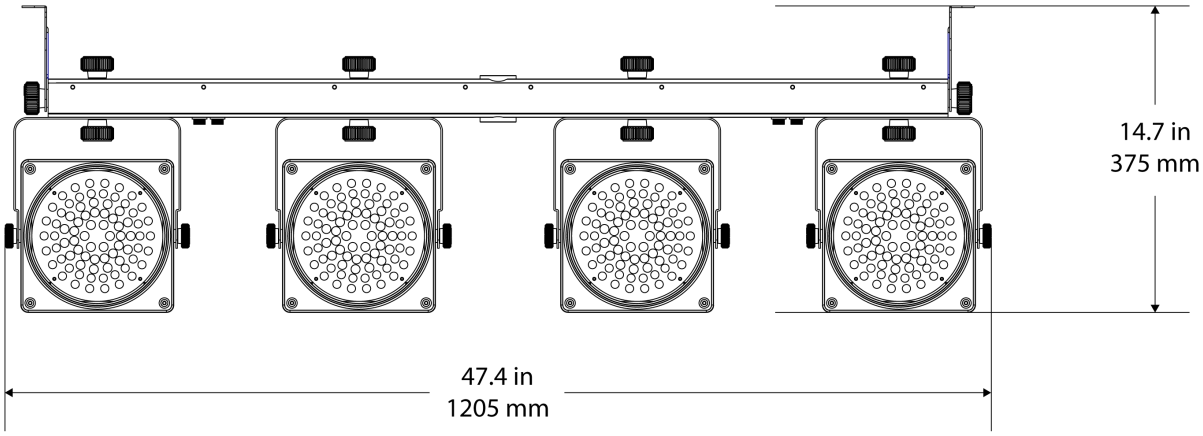
- Keep this User Manual for future use. If you sell the product to another user, be sure that they also receive this document.

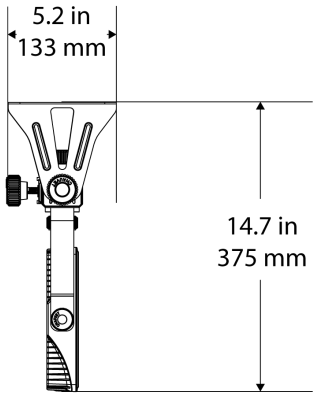
2. INTRODUCTION

Product Overview



Product Dimensions





3. SETUP

AC Power

The 4BAR™ Flex has an auto-ranging power supply and it can work with an input voltage range of 100~240 VAC, 50/60 Hz.

To determine the product's power requirements (circuit breaker, power outlet, and wiring), use the current value listed on the label affixed to the product's back panel, or refer to the product's Technical Specifications. The listed current rating indicates the product's average current draw under normal conditions.

Always connect the product to a protected circuit (circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.

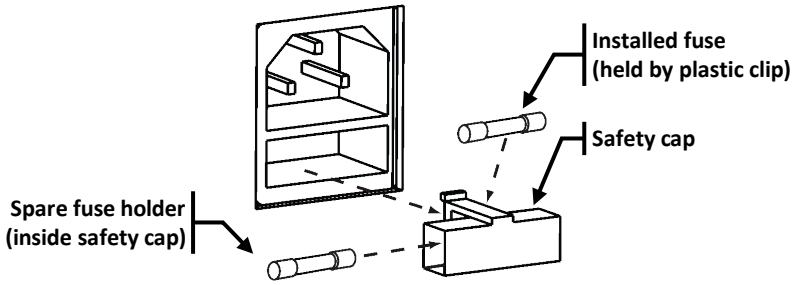
Never connect the product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0% to 100% switch.

Fuse Replacement

Follow the instructions below to change the fuse, if necessary.

Disconnect the product from the power outlet before replacing the fuse.

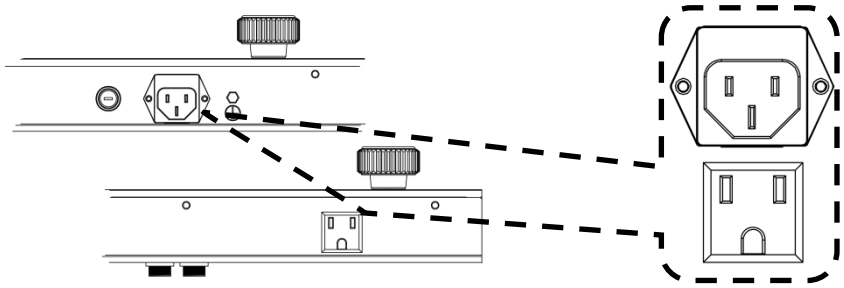
1. Wedge the tip of a flat-head screwdriver into the slot of the fuse holder.
2. Pry the fuse holder out of the housing.
3. Remove the blown fuse from the holder and replace with a fuse of the exact same type and rating.
4. Insert the fuse holder back in place and reconnect power.



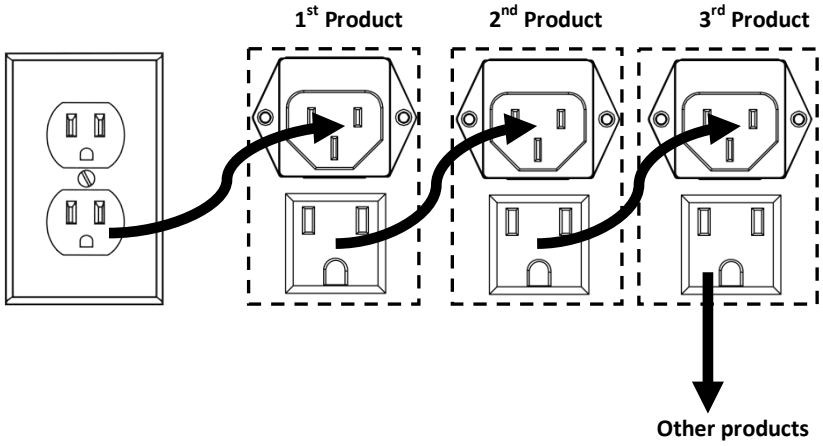
The product does not ship with a spare fuse; however, the safety cap has room for a spare.

Power Linking

The product provides power linking via the IEC outlet located in the back of the unit. Please see the diagram below for further explanation.



Power Linking Diagram



You can power link up to twelve (12) 4BAR™ Flex units on 120 VAC or up to twenty-one (21) 4BAR™ Flex units on 230 VAC.

The power linking diagram shown above corresponds to the North American version of the product ONLY! If using the product in other markets, you must consult with the local CHAUVET® distributor as power linking connectors and requirements may differ in your country or region.

Mounting

Before mounting the product, read and follow the safety recommendations indicated in the Safety Notes.

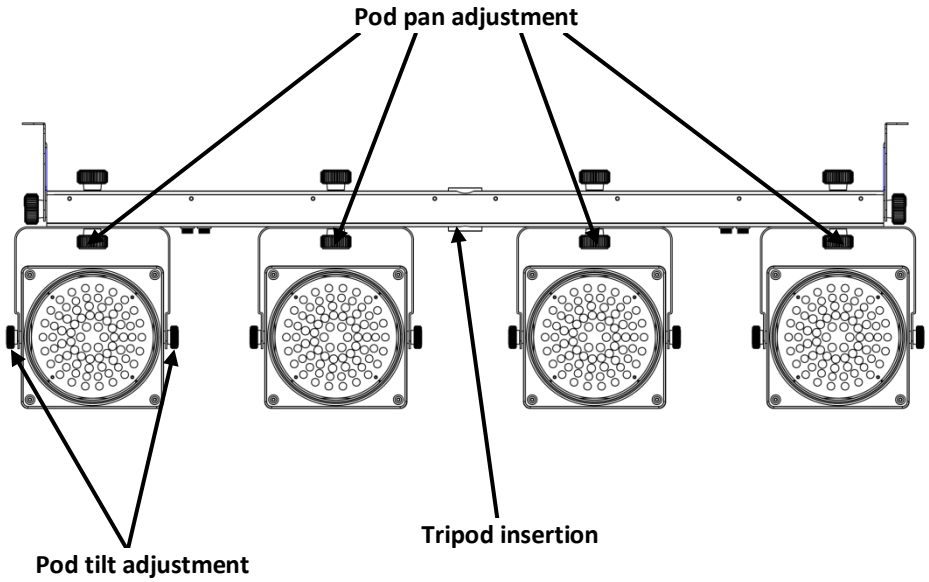
Orientation

The 4BAR™ Flex may be mounted in any position; however, make sure adequate ventilation is provided around the product.

Rigging

- Before deciding on a location for the product, always make sure there is easy access to the product for maintenance and programming purposes.
- Make sure that the structure onto which you are mounting the product can support the product's weight. Please see the Technical Specifications for weight information.
- When mounting the product overhead, always use a safety cable. Mount the product securely to a rigging point, whether an elevated platform or a truss.
- When rigging the product onto a truss, you should use a mounting clamp of appropriate weight capacity.
- When power linking multiple products, you must always consider the length of the power linking cable and mount the products close enough for the cable to reach.
- The bracket adjustment knobs allow for directional adjustment when aiming the product to the desired angle. Only loosen or tighten the bracket knobs manually. Using tools could damage the knobs.

Mounting Diagram



4. OPERATION

Control Panel Operation

To access the control panel functions, use the four buttons located underneath the display. See the Product Overview to see the button locations on the control panel.

Button	Function
<MENU>	Press to find an operation mode or to back out of the current menu option
<UP>	Press to scroll up the list of options or to find a higher value
<DOWN>	Press to scroll down the list of options or to find a lower value
<ENTER>	Press to activate a menu option or a selected value

Menu Map

Mode	Programming Steps		Description
DMX Mode	**512**	**d 1-512**	Sets DMX starting address
Sound Active Mode	**SND**	**S 1-S100**	Sets Sound Active mode and sensitivity
Automatic Mode	**AUTO**	**S 1-S100**	Sets Auto Program and speed

Configuration (DMX)

Set the product in DMX mode to control with a DMX controller.

1. Connect the product to a suitable power outlet.
2. Turn the product on.
3. Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket on the product.

DMX Personalities and Starting Address

The 4BAR™ Flex has a single 15-channel personality.

The 4BAR™ Flex uses up to 15 DMX channels in its highest DMX mode, which defines the highest configurable address to **498**.

When selecting a starting DMX address, always consider the number of DMX channels the selected DMX mode uses. If you choose a starting address that is too high, you could restrict the access to some of the product's channels.

If you are not familiar with the DMX protocol, download the DMX Primer from www.chauvetlighting.com.

To choose your starting address:

1. Press **<MENU>** repeatedly until **512** shows on the display.
2. Press **<ENTER>**
3. Use **<UP>** or **<DOWN>** to select the starting address.
1. Press **<ENTER>**.

DMX Channel Assignments and Values

15-CH

Channel	Function	Value	Setting	
1	Control/Operating Mode	000 ⇔ 009	RGB Color Mixing Mode	
		010 ⇔ 029	Auto Program 1	
		030 ⇔ 049	Auto Program 2	
		050 ⇔ 069	Auto Program 3	
		070 ⇔ 089	Auto Program 4	
		090 ⇔ 109	Auto Program 5	
		110 ⇔ 129	Auto Program 6	
		130 ⇔ 149	Auto Program 7	
		150 ⇔ 169	Auto Program 8	
		170 ⇔ 189	Auto Program 9	
		190 ⇔ 209	Auto Program 10	
		210 ⇔ 229	Auto Program 11	
		230 ⇔ 249	Auto Program 12	
		250 ⇔ 255	Sound Active Mode	
2	Dimmer	000 ⇔ 008	No function	
		009 ⇔ 255	Dimmer 1~100%	
3	Strobe	000 ⇔ 255	0~100%	
4	Red	000 ⇔ 255	0~100%	RGB Color Mixing (Pod 1)
5	Green	000 ⇔ 255	0~100%	
6	Blue	000 ⇔ 255	0~100%	
7	Red	000 ⇔ 255	0~100%	RGB Color Mixing (Pod 2)
8	Green	000 ⇔ 255	0~100%	
9	Blue	000 ⇔ 255	0~100%	
10	Red	000 ⇔ 255	0~100%	RGB Color Mixing (Pod 3)
11	Green	000 ⇔ 255	0~100%	
12	Blue	000 ⇔ 255	0~100%	
13	Red	000 ⇔ 255	0~100%	RGB Color Mixing (Pod 4)
14	Green	000 ⇔ 255	0~100%	
15	Blue	000 ⇔ 255	0~100%	

Configuration (Standalone)

Set the product in one of the standalone modes to control without a DMX controller.

1. Connect the product to a suitable power outlet.
2. Turn the product on.

Never connect a product that is operating in any standalone mode (either Automatic or Sound) to a DMX string connected to a DMX controller. Products in standalone mode may transmit DMX signals that could interfere with the DMX signals from the controller.

Sound-Active Mode

To enable the Sound Active mode, do the following:

1. Press **<MENU>** repeatedly until **SND** shows on the display.
2. Press **<ENTER>**.
3. Use **<UP>** or **<DOWN>** to adjust the sensitivity of the microphone from **S 1** (low) to **S100** (high).
4. Press **<ENTER>**.
5. Turn the music on and adjust the microphone sensitivity knob until the product starts responding to the beat of the music.

The product will only respond to low frequencies of music (bass and drums).

Automatic Mode

To enable the Automatic Mode, follow the instructions below:

1. Press **<MENU>** repeatedly until **AUTO** shows on the display.
2. Press **<ENTER>**.
3. Use **<UP>** or **<DOWN>** to adjust the duration of each step of the automatic program from **S 1** (fast) to **S100** (slow).
4. Press **<ENTER>**.

Master/Slave Mode

The Master/Slave mode allows a single 4BAR™ Flex unit (the “master”) to control the actions of one or more 4BAR™ Flex units (the “slaves”) without the need of a DMX controller. The master unit will be set to operate in either Automatic or Sound Active mode, while the slave units will be set to operate in Slave mode. Once set and connected, the slave units will operate in unison with the master unit.

Configure the units as indicated below.

Slave units:

1. Press **<MENU>** repeatedly until **512** shows on the display.
2. Press **<ENTER>** to accept.
3. Set the DMX address to **001**.
4. Connect the DMX input of the first slave unit to the DMX output of the master unit.
5. Connect the DMX input of the subsequent slave units to the DMX output of the previous slave unit.
6. Finish setting and connecting all the slave units.

Master unit:

1. Set the master unit to operate in either Automatic or Sound mode.
2. Make the master unit the first unit in the DMX daisy chain.

- **Configure all the slave units before connecting the master unit to the DMX daisy chain.**
- **Never connect a DMX controller to a DMX string configured for Master/Slave operation because the controller may interfere with the signals from the master unit.**
- **Do not connect more than 31 slave units to the master unit.**

Footswitch Operation

The included footswitch provides quick access to the preset colors, color change programs, and triggering via the onboard microphone on the 4BAR™ Flex:

1. Power on the fixture.
2. Connect the footswitch to the 4BAR™ Flex via the 4-pin connection cable with plug.
3. Press pedal #1 (Preset) to activate control. When this is operating properly, the LEDs on the 4BAR™ Flex will light white (first function on pedal #1).

Pedal	Sub-option	Function
1 (Preset)	1 x press	White
	2 x press	Red
	3 x press	Green
	4 x press	Blue
	5 x press	Yellow
	6 x press	Magenta
	7 x press	Cyan
	8 x press	Color change every second in a continuous loop
	9 x press	Color change every three seconds in a continuous loop
2 (Sound On)	1 x press	Sound controlled
3 (Blackout)	1 x press	All LEDs off (blackout)

There is no need to modify any settings for the 4BAR™ Flex before connecting the footswitch. It will operate properly in any mode.

Plug the master fixture in LAST!

Disconnecting the Footswitch

In order to properly disconnect the footswitch, please follow these steps:

1. Unplug the footswitch from the 4BAR™ Flex.
2. Turn the power to the fixture off (unplug the power cable).
3. Turn the power to the fixture on again (plug in the power cable), and the fixture will properly operate on any one of the three modes.

5. TECHNICAL INFORMATION

Product Maintenance

Dust build-up reduces light output performance and can cause overheating. This can lead to reduction of the light source's life and mechanical wear. To maintain optimum performance and minimize wear, you should clean your lighting products at least twice a month. However, be aware that usage and environmental conditions could be contributing factors to increasing the cleaning frequency.

To clean the product, follow the instructions below:

- Unplug the product from power.
- Wait until the product is cold.
- Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external surface/vents.
- Clean all transparent surfaces with a mild soap solution, ammonia-free glass cleaner, or isopropyl alcohol.
- Apply the solution directly to a soft, lint-free cotton cloth or a lens cleaning tissue.
- Softly wipe any dirt or grime to the outside edge of the transparent surface.
- Gently polish the transparent surfaces until they are free of haze and lint.

Always dry the transparent surfaces carefully after cleaning them.

General Troubleshooting

Symptom	Possible Cause	Possible Action
Circuit breaker or fuse keeps blowing	Excessive load on the circuit	Make sure that the total load does not exceed 80% of the breaker or fuse nominal current
	Short circuit along the power lines	Check the power lines and power cords
Product does not power up	No energy on power outlet	Check power outlet Change to another outlet
	Loose or damaged power cord	Check the power cord
	Blown fuse	Replace blown fuse with a good one of the same type and rating
	Internal problem	Send product for repair
Product does not respond to DMX	Wrong starting address on the product	Set the correct starting address on the product Use the right fader(s) on the controller
	Wrong DMX personality on the product	Set the correct DMX product's personality Assign the faders accordingly
	Wrong polarity setting on the DMX controller	Change the signal polarity on the controller
	Loose or damaged DMX cable	Check the DMX cable before the faulty unit
	Internal problem	Send product for repair
Intermittent DMX Problems	Signal cables are not DMX compatible	Replace non DMX cables with true DMX cables
	Interference with AC or radio signals	Keep DMX cables away from AC wires or radio equipment
	DMX cable too long	Install an optically coupled DMX amplifier right before the product with intermittent problems
	Too many products connected	Install an optically coupled DMX amplifier after unit #32
	Terminator not connected	Install a terminator, as shown in the DMX Primer

If you still experience problems after trying the above solutions, contact CHAUVET® Technical Support.

Contact Procedure

In case you need to return a product or request support, follow the procedure below:

- If you live in the U.S., contact CHAUVET® World Headquarters (see below).
- If you live in the UK or Ireland, contact CHAUVET® Europe Ltd. (see below).
- If you live in any other country, DO NOT contact CHAUVET®. Instead, contact your distributor of record. Refer to our website for contact details of distributors outside the U.S., United Kingdom, or Ireland.

CHAUVET® Contact Information

World Headquarters
CHAUVET®
General Information

Address:	5200 NW 108th Avenue Sunrise, FL 33351
Voice:	(954) 929-1115
Fax:	(954) 929-5560
Toll free:	(800) 762-1084

Technical Support

Voice:	(954) 929-1115 (Press **4**)
Fax:	(954) 756-8015
Email:	tech@chauvetlighting.com

World Wide Web
www.chauvetlighting.com

United Kingdom & Ireland
CHAUVET® Europe Ltd.
General Information

Address:	Unit 1C Brookhill Road Industrial Estate Pinxton, Nottingham, UK NG16 6NT
Voice:	+44 (0)1773 511115
Fax:	+44 (0)1773 511110

Technical Support
Email: uktech@chauvetlighting.com

World Wide Web
www.chauvetlighting.co.uk

If you live outside the U.S., United Kingdom, or Ireland, contact your distributor of record and follow their instructions on how to return CHAUVET® products to them. Visit our website for contact details.

Returning Products to CHAUVET®

Call the corresponding CHAUVET® Tech Support office and request a Return Merchandise Authorization (RMA) number before shipping the product. Be prepared to provide the model number, serial number, and a brief description of the cause for the return.

You must send the merchandise prepaid, in its original box, and with its original packing and accessories. CHAUVET® will not issue call tags.

Clearly label the package with the RMA number. CHAUVET® will refuse any product returned without an RMA number.

Write the RMA number on a properly affixed label. DO NOT write the RMA number directly on the box.

Before sending the product, clearly write the following information on a piece of paper and place it inside the box:

- Your name
- Your address
- Your phone number
- The RMA number
- A brief description of the problem

Be sure to pack the product properly. Any shipping damage resulting from inadequate packaging will be your responsibility. Proper FedEx packing or double-boxing are recommended.

CHAUVET® reserves the right to use its own discretion to repair or replace returned product(s).

6. TECHNICAL SPECIFICATIONS

Dimensions and Weight

Length	Width	Height	Weight
47.4 in (1,205 mm)	5.2 in (133 mm)	14.7 in (375 mm)	13.5 lbs (6 kg)

Note: Dimensions in inches rounded to the nearest decimal digit.

Power

Power Supply Type	Range	Voltage Selection
Switching (internal)	100~240 V, 50/60 Hz	Auto-ranging

Parameter	120 V, 60 Hz	230 V, 50 Hz
Consumption	47 W	46 W
Operating	0.7 A	0.4 A
Power linking current (units)	8 A (12 units)	8 A (21 units)
Fuse	F 2 A, 250 V	F 2 A, 250 V

Power I/O	US/Worldwide	UK/Europe
Power input connector	IEC	IEC
Power output connector	Edison	IEC
Power Cord plug	Edison (US)	Local plug

Light Source

Type		Lifespan
LED		50,000 hours

Color	Quantity
Red	144
Green	144
Blue	144

Photo Optic

Parameter	
Illuminance @ 2 m	558 lux
Beam angle	21º
Field angle	33°

Thermal

Maximum External Temp.	Cooling System
104° F (40° C)	Convection

DMX

I/O Connectors	Connector Type	Channel Range
3-pin XLR	Sockets	15

Ordering

Product Name	Item Code	Item Number
4BAR™ Flex	03030504	4BARFLEX